



Tone King Ironman II Mini & Radial Engineering Headload Attenuators

TESTED BY DAVE HUNTER

OUTPUT ATTENUATORS HAVE GONE from being the redheaded stepchildren of the accessory world (Don't touch that thing... it'll destroy your amp!) to being better-designed, better-built, and better-appreciated tools that a large number of guitarists find indispensable for achieving their beloved tones. With this broader acceptance has come a willingness to push the envelope, and clever makers are busting beyond the stark, brick-like box to add useful performance features that greatly expand the range of these devices. These two new offerings are very different, but they're equally creative in their approaches.

IRONMAN II MINI

The original 100-watt Ironman was much praised for its transparent sound, but it was a huge and heavy beast that was expensive to produce, and therefore carried an equally robust price tag of \$850. With that unit now discontinued, Tone King's Mark Bartel has compacted the technology into the Ironman II Mini (\$395 street), a 30-watt attenuator, which, in his words, "is built upon a new, improved architecture that—unlike the original Ironman—does not include transformer coupling, and which features two distinct technical updates: a tuned reactive

load, and Fletcher-Munson EQ compensation. The primary difference between the old and new architectures is that the new one corrects for the way the ear perceives sound differently at low volume, while the old one did not."

The Mini is built inside an enclosure the size of a large effects pedal, which lets you actually use it like a pedal. In addition to the requisite attenuation features (see Specs box), the unit has a stomp switch that enables a solo mode, upping your amp's decibels by a proportion predetermined by the current attenuation setting. This function does provide a nifty level lift, thus doing its job well, although its preset nature is somewhat limiting.

Obviously the Ironman II Mini's power handling is lower than that of many units, but plenty of guitarists using amps of 30 watts and less

still need to knock down some dBs occasionally. By including a Hi/Lo Range switch, and the aforementioned Solo footswitch, this unit manages to achieve 17 distinctive attenuation settings (plus bypass) from a 6-position rotary knob, taking you from a minimum of -3dB of output reduction to a maximum of -38dB in usefully small steps. There's also a 3-position Presence switch to add back highs at more extreme settings. Many players will simply use the Ironman II Mini as a top-of-amp attenuator with short cable runs, but if you're thinking that pedalboard placement sounds far-fetched, fear not: Bartel assures us that tube amps of 30 watts or less can easily live with speaker-cable runs of 20 feet or more to and from the attenuator with no appreciable loss of tone.

I tested the Ironman II Mini with an AC15-style



head and a custom JTM45-based head loaded with 6V6s to reduce its output to around 22 watts, connected to a range of cabs, both with short cables top-of-amp and with long cables in floor-pedal position. Some players will plug in an attenuator, crank it down to bedroom levels—maximum attenuation—then complain about how the unit alters their tone. The Ironman II Mini will go down to whisper-quiet, and sound reasonably good in the process, but the better test was in knocking off a reasonable 6dB to 9dB, at which levels I found it impressively accurate and unobtrusive. Coupled to either amp at such settings, the device gave me levels I'd happily enjoy at any smaller club gig without bemoaning any loss of depth, fidelity, or dynamics, and certainly came out the equal or better of many quality attenuators I have tried. All in all, the Ironman II Mini is a well-conceived device that's deserving of attention.

HEADLOAD

Although larger and heavier than some attenuators, the Radial Headload (\$899 street) packs a ton of features. The core of this box consists of a 120-watt resistive load (capable of brief peaks of up to 180 watts) with five levels of attenuation (plus bypass), along with a Range knob to fine-tune reduction from 20 percent on down. Lo and Hi Resonance switches help to compensate for frequency loss at higher settings, and each unit comes at a fixed impedance (our test unit was 8Ω, but 4Ω and 16Ω versions are available). The Headload offers quite a lot beyond its pure attenuation capabilities: Radial has included its JDX DI system with dual-band EQ, six settings of speaker-cab voicings, loads of balanced and unbalanced outputs, a Phaser circuit for precise phase alignment when blending the DI with the signal from a miked cab, and a 1/4" headphone out with a Level control. What's missing? I'd say just taller feet, which would be useful to help the unit straddle an amp's handle when sitting on top.

I tested the Headload with an AC15-style head, as well as a custom JTM45-style head loaded with EL34s for around 45 watts of power. For pure attenuation purposes, the Headload works well and sounds great, with good retention of the amp's core tone at reasonable attenuation levels, along with handy compensation (if needed) via its Resonance switches. I could have used a setting in-between 60 and 40

percent on the Load dial—a real sweet spot for club and studio levels seems to live right about there—but that's no major deal.

As for the extras, they all functioned extremely well, proving the design both well-engineered and extremely well thought out. The speaker-emulated voicings available through the DI might not be quite the stuff of top-level plug-in speaker and cab sims, but they helped to achieve an excellent and accurate sound both straight into the DAW and into a small PA. As promised, the Phaser enabled me to blend in a mic with ease, and the headphone out worked just as it should, making the Headload a very useful late-night-jam tool for those moments when you need to crank the plexi without waking the baby. If you just need an attenuator you will likely look elsewhere (or consider Radial's Headload Prodigy, which streets for \$400), but



as a versatile and fully featured performance tool, the Headload's outstanding functionality makes it hard to beat.

SPECIFICATIONS

RADIAL ENGINEERING HEADLOAD

CONTACT	radialeng.com
PRICE	\$899 street

CONTROLS Amp/Speaker Load section: Load (attenuation level), Range (sub 20 percent fine-tuner), Resonance Hi and Lo on/off switches. JDX DI: Low and High EQ, 6-position Speaker Cab Voicing switch. Phaser: 0-180° Shift knob, On switch, and 180°/360° switch. Headphone Level and stereo output.

POWER HANDLING 120 watts
IMPEDANCE 8Ω (4Ω and 16Ω available)
CONNECTIVITY Amplifier in, dual Speaker outs, two balanced XLR outs (pre-EQ, post-EQ) for JDX DI with phase and ground-lift switching, pre- and post-EQ unbalanced 1/4" outs with Level control

EXTRAS Built-in JDX DI with comprehensive connectivity (see above), Phaser circuit for phase-aligning DI and miked signals, headphone out with Level control

WEIGHT 8 lbs
BUILT Canada
KUDOS Good tone retention from both attenuation and DI functions. Comprehensive feature set.

CONCERNS Might benefit from more gradual attenuation steps, especially at the lower (louder) reduction levels.

SPECIFICATIONS

STONE KING IRONMAN II MINI

CONTACT	toneking.com
PRICE	\$395 street

CONTROLS Attenuation Level, Range switch (Hi/Lo), Presence switch (0 dB, -3dB, -6dB), Solo footswitch

POWER HANDLING 30 watts
IMPEDANCE 8Ω
CONNECTIVITY Amplifier in, Speaker out, Line Out, DC 9V in (to power Solo light only)

EXTRAS Solo switch for 3dB or 6dB solo boost

WEIGHT 5 lbs
BUILT USA
KUDOS Simple and compact. Broad range of attenuation levels and excellent tone retention at reasonable settings.

CONCERNS None.